

MALLOPHAGA FROM BIRDS OF NORTH AMERICA

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SIXTY years have elapsed since a list of Mallophaga with their hosts was made (Kellogg, 1899. Smithsonian Institution Bull. XII:39-100). During this time many new species have been described and new genera have been erected.

The purpose of this paper is to stimulate interest among biologists, including the bird banders, to study the parasites of birds. Almost all birds have parasites, and the bander has a good opportunity to take these without killing the birds, as was done in the past. I would suggest that the bander obtain official sanction (on his banding permit) to carry on this work. He can take these parasites by a very simple delousing process as follows:

Procure an insecticidal powder, pyrethrum for example, a few sheets of white paper and a paper carton. After the bird has been banded, thoroughly dust some of the powder through the feathers, but be careful not to get any powder into the eyes of the birds. Now place the bird on a sheet of white paper and invert the paper carton over it. Allow the bird to flutter around in this enclosure for about five minutes. In the meantime the parasites will have crawled to the tips of the feathers and dropped to the paper. Some of the lice will show movement, but all can be picked up by a small camel hair brush and transferred to a piece of medicinal cotton.

If the bander is not interested in collecting and identifying these parasites for himself, he may record on a slip of paper, the name of the bird, date, place taken and his name as collector. The piece of cotton containing label and specimens may be dropped into an envelope and mailed to some mallophagologist.

The cotton method is the most convenient way to send specimens by mail. On the other hand, if the bander is interested in collecting and identifying his own material, he should put the specimens taken from each bird into separate small vials containing 70 per cent alcohol, to preserve them for some future time. A small slip of paper containing the collector's name, name of the bird, date and place taken should be inserted in the vial. Labels printed with soft pencil will be legible indefinitely in 70 per cent alcohol.

To identify the material collected requires a definite process of mounting on microscope slides. Good results may be obtained by the following method:

1. Transfer contents of each vial to a vial of 20 per cent potassium hydroxide for a period of 24 to 48 hours, depending upon the degree of scleritization of the lice.
2. Wash in distilled water 30 minutes.
3. Dehydrate with 35 per cent alcohol for 10 minutes.
4. Place in 50 per cent alcohol for 10 minutes.
5. Place in 70 per cent alcohol for 10 minutes.

6. Place in 85 per cent alcohol plus 15 per cent benzol for 10 minutes.
7. Place in 95 per cent alcohol plus 50 per cent benzol for 10 minutes.
8. Place in absolute alcohol plus 75 per cent benzol for 10 minutes.
9. Place in 100 per cent benzol for 5 minutes.
10. Mount in euparal or a medium with benzol base.
11. Mount in center of slide and cover with 18 mm. round cover slip.

There are more than 2600 recorded species of living Mallophaga, and this paper lists 800 of these species and about 500 species of birds from which they are recorded. I have not recorded any subspecies of Mallophaga. This list of about 800 species probably represents about one fourth of the species yet to be described.

In this paper the birds are listed phylogenetically. Under each bird is listed the scientific names of the Mallophaga known to infest it, as described in the literature of Systematic Entomology. I have followed very closely the classification of Hopkins and Clay in, "A Check List of the Genera and Species of Mallophaga" (1952. British Museum, London).

ACKNOWLEDGMENTS

I appreciate the helpful suggestions and the exchange of literature from G. H. E. Hopkins and Theresa Clay of the British Museum. My thanks are also extended to Dr. Lowell Taylor, of the Dow Chemical Company Research Library, Midland, Michigan, for courtesies extended in this work. To my wife Sibyl I am indebted for successfully encouraging me to complete this work.

HOST LIST WITH PARASITES

Great Tinamou, <i>Tinamus major</i>	<i>Austrokelloggia boucardi</i>
<i>Kelloggia brevipes</i>	<i>Discocorpus furculus</i>
<i>Heptapsogaster minutus</i>	<i>Heptapsogaster boucardi</i>
<i>H. parvulus</i>	<i>H. modestae</i>
<i>Megaginus quadrithorax</i>	<i>H. tuxtlae</i>
<i>Menacanthus laticephalus</i>	<i>Megapeostus multiplex</i>
<i>Ornicolax alienus</i>	<i>Pectenosoma boucardi</i>
<i>O. mexicanus</i>	<i>Pseudolipeurus similis</i>
<i>O. robustus</i>	<i>Rhopaloceras heterogenitalis</i>
<i>Pseudolipeurus tinami</i>	<i>Strongylocotes boucardi</i>
<i>Pterocotes aberrans</i>	Rufescent Tinamou, <i>Crypturellus cinnamo-</i>
<i>Rhopaloceras simplex</i>	<i>meus</i>
<i>Strongylocotes pellucidifrons</i>	<i>Heptapsogaster acutiventris</i>
Little Tinamou, <i>Crypturellus soui</i>	<i>Heterogoniodes araeceps</i>
<i>Heptapsogaster costaricensis</i>	<i>Megapeostus secundus</i>
<i>H. tapicollae</i>	<i>Pectenosoma cinnamomea</i>
<i>Megaginus laticypeus</i>	<i>Strongylocotes fimbriatus</i>
<i>Pectenosoma meserythra</i>	<i>S. interruptus</i>
<i>Physsonella kelloggi</i>	Bonaparte's Tinamou, <i>Nothocercus bona-</i>
<i>Rhopaloceras rudimentarius</i>	<i>partei</i>
Slaty-breasted Tinamou, <i>Crypturellus bou-</i>	<i>Nothocotus distinctus</i>
<i>cardi</i>	<i>N. parvithorax</i>

- Common Loon, *Gavia immer*
Craspedonirmus bisetosus
- Arctic Loon, *Gavia arctica*
Craspedonirmus atricolor
C. colymbinus
C. frontatus
- Red-throated Loon, *Gavia stellata*
Craspedonirmus colymbinus
C. frontatus
- Horned Grebe, *Podiceps auritus*
Aquanirmus colymbinus
- Eared Grebe, *Podiceps caspicus*
Aquanirmus americanus
Incidifrons fulicae
Laemobothrion simili
Pseudomenopon insolens
- Western Grebe, *Aechmophorus occidentalis*
Pseudomenopon par
- Pied-billed Grebe, *Podilymbus podiceps*
Aquanirmus americanus
- Short-tailed Albatross, *Diomedea albatrus*
Docophoroides brevis
D. pacificus
Harrisoniella densa
Perineus concinnus
P. giganticola
Procellariphaga navigans
P. pinquis
- Black-footed Albatross, *Diomedea nigripes*
Docophoroides ferrisi
Episbates machilhennyi
Perineus confidens
- Black-browed Albatross, *Diomedea melanophris*
Docophoroides harrisoni
D. murphyi
D. simplex
- White-capped Albatross, *Diomedea cauta*
Docophoroides brevis
- Yellow-nosed Albatross, *Diomedea chlororhynchos*
Docophoroides murphyi
- Cape Petrel, *Daption capensis*
Ancistrana procellariae
Naubates testaceus
Procellariphaga daptionis
Pseudonirmus gurlti
- Fulmar, *Fulmarus glacialis*
Ancistrana vagelli
- Perineus nigrolimbatus*
Austromenopon brevifimbriata
Saemundssonina occidentalis
- Black-tailed Shearwater, *Adamastor cinereus*
Halipeurus agusticeps
- Cory's Shearwater, *Puffinus diomedea*
Saemundssonina peusi
- Pink-footed Shearwater, *Puffinus creatopus*
Naubates major
- Greater Shearwater, *Puffinus gravis*
Halipeurus abnormis
Naubates harrisoni
- Wedge-tailed Shearwater, *Puffinus pacificus*
Clypedon pacificus
Longimenopon puffinus
- Sooty Shearwater, *Puffinus griseus*
Halipeurus diversus
Procellariphaga paulula
- Manx Shearwater, *Puffinus puffinus*
Naubates major
Saemundssonina valida
Trabeculus aviator
T. mirabilis
- Audubon's Shearwater, *Puffinus lherminieri*
Clypedon pacificus
Procellariphaga narboroughi
- Fork-tailed Petrel, *Oceanodroma furcata*
Philoceanus annuliventris
- Leach's Petrel, *Oceanodroma leucorhoa*
Acidoproctus kelloggi
Halipeurus subangusticeps
Saemundssonina incisa
- Guadalupe Petrel, *Oceanodroma macrodactyla*
Longimenopon dominicanum
- Red-billed Tropic-bird, *Phaëthon aethereus*
Austromenopon becki
Saemundssonina breviantennata
S. phaetona
- Red-tailed Tropic-bird, *Phaëthon rubricauda*
Saemundssonina hexagona
- White Pelican, *Pelecanus erythrorhynchos*
Colpocephalum unciferum
Piagetiella peralis
- Brown Pelican, *Pelecanus occidentalis*
Colpocephalum unciferum
Pectinopygus occidentalis

- Piagetiella bursaepelecani*
Blue-faced Booby, *Sula dactylatra*
Pectinopygus jamaicensis
Blue-footed Booby, *Sula nebouxii*
Pectinopygus minor
Brown Booby, *Sula leucogaster*
Pectinopygus annulatus
P. garbei
Red-footed Booby, *Sula sula*
Pectinopygus sularum
Gannet, *Morus bassanus*
Eidmanniella pustulosa
Pectinopygus bassani
Great Cormorant, *Phalacrocorax carbo*
Eidmanniella brevipalpis
Pectinopygus gyricornis
Double-crested Cormorant, *Phalacrocorax auritus*
Eidmanniella kuwani
Pectinopygus gyricornis
Piagetiella incomposita
Olivaceous Cormorant, *Phalacrocorax olivaceus*
Eidmanniella eurygaster
Pectinopygus jaralloni
P. gyroceras
Piagetiella vigua
Brandt's Cormorant, *Phalacrocorax penicillatus*
Eidmanniella kuwani
Piagetiella incomposita
Anhinga, *Anhinga anhinga*
Pectinopygus anHINGE
Magnificent Frigate-bird, *Fregata magnificens*
Pectinopygus crenatus
Gray Heron, *Ardea cinerea*
Ardeicola ciconiae
A. ardeae
Ciconiphilus decimfasciatus
Common Egret, *Casmerodius albus*
Ardeicola albulus
Ciconiphilus obscurus
Little Egret, *Egretta garzetta*
Ardeicola expallidus
Black-crowned Night Heron, *Nycticorax nycticorax*
Ciconiphilus nyctardis
Least Bittern, *Ixobrychus exilis*
Ardeicola stellaris
American Bittern, *Botaurus lentiginosus*
Ardeicola stellaris
Wood Ibis, *Mycteria americana*
Ardeicola loculater
Ciconiphilus maculipes
C. femoratus
Colpocephalum scalariforme
Neophilopterus heteropygus
Glossy Ibis, *Plegadis falcinellus*
Ardeicola raphidius
Ciconiphilus blagoweschenskii
Colpocephalum leptopygos
Ibidoecus bisignatus
I. robustus
Plegadiphilus plegadis
White Ibis, *Eudocimus albus*
Colpocephalum fusconigrum
Ibidoecus bimaculatus
Scarlet Ibis, *Eudocimus ruber*
Ardeicola gracilentus
Ibidoecus hians
White Spoonbill, *Platalea leucorodia*
Eucolpocephalum femorale
Ibidoecus plataleae
Roseate Spoonbill, *Ajaia ajaja*
Colpocephalum ajajae
Ibidoecus iberoamericanus
American Flamingo, *Phoenicopterus ruber*
Anaticola candidus
Mute Swan, *Cygnus olor*
Ornithobius cygni
Whooper Swan, *Olor cygnus*
Anatoecus musicus
Whistling Swan, *Olor columbianus*
Ornithobius cygni
Canada Goose, *Branta canadensis*
Ornithobius goniopterus
Trinoton anserium
Brant, *Branta bernicla*
Anaticola crassicornis
Anatoecus dentatus
Barnacle Goose, *Branta leucopsis*
Anatoecus brunneopygus
Ornithobius hexophthalmus
White-fronted Goose, *Anser albifrons*
Anaticola brevimaclatus
A. serratus
Trinoton squalidum

- Domestic Goose, *Anser a. domesticus*
Anaticola anseris
Anatoecus adustus
Ciconiphilus parvus
C. pectiniventris
Ornithobius mathisi
Trinoton anserium
T. squalidum
- Black-bellied Tree Duck, *Dendrocygna autumnalis*
Acidoproctus hopkinsi
- Fulvous Tree Duck, *Dendrocygna bicolor*
Anaticola chaetodens
- West Indian Tree Duck, *Dendrocygna arborea*
Acidoproctus maximus
- White-faced Whistling Duck, *Dendrocygna viduata*
Acidoproctus rostratus
- Sheld-Duck, *Tadorna tadorna*
Anaticola tadornae
Colpocephalum quadriseriatum
- Mallard, *Anas platyrhynchos*
Anaticola crassicornis
A. parviceps
A. zukeri
Anatoecus adustus
Holomenopon transvaalense
Trinoton querquedulae
- Black Duck, *Anas rubripes*
Anaticola crassicornis
Anatoecus dentatus
Trinoton lituratum
T. querquedulae
- Gadwall, *Anas strepera*
Anaticola depurcatus
Anatoecus dentatus
Trinoton querquedulae
- Pintail, *Anas acuta*
Holomenopon clypeilargum
Trinoton luridum
- Common Teal, *Anas crecca*
Anaticola sordidus
Holomenopon leucoanthum
- Green-winged Teal, *Anas carolinensis*
Anatoecus dentatus
- Blue-winged Teal, *Anas discors*
Anatoecus dentatus
- European Widgeon, *Mareca penelope*
Anaticola penelopes
Holomenopon marecae
Trinoton spinosum
- American Widgeon, *Mareca americana*
Anaticola crassicornis
Trinoton luridum
T. querquedulae
- Shoveler, *Spatula clypeata*
Anaticola hopkinsi
Anatoecus ferrugineus
Holomenopon steigerum
Trinoton squalidum
- Wood Duck, *Aix sponsa*
Anaticola lepidotus
Anatoecus dentatus
- Redhead, *Aythya americana*
Anatoecus dentatus
- Common Pochard, *Aythya ferina*
Anatoecus difficilis
- Canvasback, *Aythya valisineria*
Acidoproctus kelloggi
- Greater Scaup, *Aythya marila*
Anatoecus dentatus
- Lesser Scaup, *Aythya affinis*
Anaticola cornicephalus
Anatoecus dentatus
Trinoton querquedulae
- Tufted Duck, *Aythya fuligula*
Anatoecus obtusus
- Barrow's Goldeneye, *Bucephala islandica*
Anaticola clangulae
- Bufflehead, *Bucephala albeola*
Anaticola crassicornis
Anatoecus dentatus
- Oldsquaw, *Clangula hyemalis*
Anaticola crassicornis
Anatoecus clangulus
A. natatorum
- Common Eider, *Somateria mollissima*
Anaticola rubromaculatus
- King Eider, *Somateria spectabilis*
Anatoecus dentatus
A. obtusus
- Muscovy Duck, *Cairina moschata*
Anaticola cairinensis
A. zunkeri
Holomenopon cairinae
H. transvaalensis
- Velvet Scoter, *Melanitta fusca*

- Anaticola punctulatus*
Anatoecus natatorium
Anaticus roesleri
White-winged Scoter, *Melanitta deglandi*
Anaticola constrictus
Holomenopon loomisi
Surf Scoter, *Melanittta perspicillata*
Anaticola constrictus
Common Scoter, *Oidemia nigra*
Anaticola augustolimbatus
Holomenopon lunarium
Trinoton minus
Ruddy Duck, *Oxyura jamaicensis*
Anaticola crassicornis
Hooded Merganser, *Lophodytes cucullatus*
Anatoecus dentatus
Common Merganser, *Mergus merganser*
Anaticola crassicornis
Anatoecus dentatus
A. ferrugineus
Trinoton querquedulae
Red-breasted Merganser, *Mergus serrator*
Anaticola crassicornis
A. mergiserrati
Anatoecus icterodes
Trinoton mergi
T. querquedulae
Turkey Vulture, *Cathartes aura*
Laemobothrion canalense
Colpocephalum kelloggi
Cuculiphilus alternatus
Falcolipeurus marginalis
Black Vulture, *Coragyps atratus*
Falcolipeurus marginalis
King Vulture, *Sarcoramphus papa*
Colpocephalum megalops
Cuculiphilus cathartaepapae
Falcolipeurus ternatus
Laemobothrion glutinans
White-tailed Kite, *Elanus leucurus*
Colpocephalum osborni
Hook-billed Kite, *Chondrohierax uncinatus*
Kurodaia keopeckei
Laemobothrion condrohieracis
Everglade Kite, *Rostrhamus sociabilis*
Craspedorrhynchus obscurus
Falcolipeurus quadriguttatus
Goshawk, *Accipiter gentilis*
Degeeriella secundaria
D. temporalis
Bicolored Hawk, *Accipiter bicolor*
Degeeriella epustulata
Cooper's Hawk, *Accipiter cooperii*
Craspedorrhynchus dilatatus
Degeeriella fusca
Red-tailed Hawk, *Buteo jamaicensis*
Colpocephalum napiforme
Craspedorrhynchus dilatatus
Laemobothrion loomisi
Red-shouldered Hawk, *Buteo lineatus*
Craspedorrhynchus buteonis
Broad-winged Hawk, *Buteo platypterus*
Kurodaia macrocybe
Swainson's Hawk, *Buteo swainsoni*
Colpocephalum costaricense
Laemobothrion buteonivorum
Rough-legged Hawk, *Buteo lagopus*
Craspedorrhynchus dilatatus
White Hawk, *Leucopternis albicollis*
Craspedorrhynchus candidus
Golden Eagle, *Aquila chrysaetos*
Colpocephalum impressum
Craspedorrhynchus aquilinus
Degeeriella fulva
Falcolipeurus auroralis
Gray Sea Eagle, *Haliaeetus albicilla*
Colpocephalum flavescens
Craspedorrhynchus macrocephalus
Degeeriella discocephalus
Falcolipeurus sulcifrons
Bald Eagle, *Haliaeetus leucocephalus*
Craspedorrhynchus halioti
Degeeriella amblys
Marsh Hawk, *Circus cyaneus*
Degeeriella fusca
Osprey, *Pandion haliaetus*
Kurodaia haliaeti
Small Forest Hawk, *Micrastur ruficollis*
Craspedorrhynchus ultimus
C. transversifrons
Caracara, *Caracara cheriway*
Cuculicola splendidus
Guadalupe Caracara, *Caracara lutosus*
Degeeriella caracarensis
Gyr Falcon, *Falco rusticolus*
Degeeriella fasciata
Peregrine Falcon, *Falco peregrinus*
Degeeriella fusca

- D. temporalis*
 Pigeon Hawk, *Falco columbarius*
Degeeriella temporalis
 Kestrel, *Falco tinnunculus*
Degeeriella rufa
Laemobothrion tinnunculi
Rediella pediculoides
 Sparrow Hawk, *Falco sparverius*
Degeeriella carruthi
D. castanea
D. giebeli
D. secundaria
Laemobothrion intermedium
L. loomisi
 Curassow, *Crax rubra*
Oxylipeurus globicerus
Amyrsidea rubra
 Crested Guan, *Penelope purpurascens*
Amyrsidea purpurascens
Oxylipeurus penelope
 Chachalaca, *Ortalis vetula*
Amyrsidea spicula
Oxylipeurus vetulae
 Dusky-headed Chachalaca, *Ortalis garrula*
Menacanthus ortalidis
Oxylipeurus costaricensis
O. postmarginatus
 Black Chachalaca, *Penelopina nigra*
Chelopistes rotundus
 Horned Guan, *Oreophasis derbianus*
Colpocephalum hoffmanni
 Blue Grouse, *Dendragapus obscurus*
Goniodes simoni
G. merriamianus
Lagopoecus obscurus
 Spruce Grouse, *Canachites canadensis*
Goniodes corpulentus
 Ruffed Grouse, *Bonasa umbellus*
Goniodes bonasus
Lagopoecus umbellus
 Willow Ptarmigan, *Lagopus lagopus*
Goniodes lagopi
Amyrsidea lagopi
A. striata
Lagopoecus affinis
 Rock Ptarmigan, *Lagopus mutus*
Lagopoecus affinis
 White-tailed Ptarmigan, *Lagopus leucurus*
Goniodes leucurus
 Greater Prairie Chicken, *Tympanuchus*
cupido
Goniodes cupido
 Sharp-tailed Grouse, *Pedioecetes phasianellus*
Goniodes nebraskensis
Lagopoecus perplexus
 Sage Grouse, *Centrocercus urophasianus*
Goniodes centroceri
Lagopoecus gibsoni
 Bobwhite, *Colinus virginianus*
Cuculotogaster maculipes
Goniodes ortygis
Lagopoecus numidianus
Lipeurus dovei
Oxylipeurus clavatus
O. cubanus
 Black-throated Quail, *Colinus nigrogularis*
Oxylipeurus yucatensis
 Scaled Quail, *Callipepla squamata*
Goniodes squamatus
Lagopoecus pallidus
Oxylipeurus callipeplus
 California Quail, *Lophortyx californicus*
Goniodes mammillatus
G. ovoidalis
Lagopoecus docophoroides
 Gambel's Quail, *Lophortyx gambelii*
Lagopoecus gambeli
 Mountain Quail, *Oreortyx pictus*
Goniodes pictus
Lagopoecus californicus
 Harlequin Quail, *Cyrtonyx montezumae*
Goniodes submamillatus
Lagopoecus mearnsi
Oxylipeurus montezumae
 Ring-necked Pheasant, *Phasianus colchicus*
Amyrsidea megalosoma
Cuculotogaster heterographus
Goniocotes chrysocephalus
Goniodes capitatus
G. colchici
Lagopoecus colchicus
Lipeurus maculosus
Oxylipeurus colchicus
 Gray Partridge, *Perdix perdix*
Amyrsidea megalosoma
A. perdicis
Cuculotogaster heterogrammicus

- Goniocotes microthorax*
G. simillimus
Goniodes dispar
Menapon pallens
Black-eared Wood-quail, *Odontophorus erythrops*
Chelopistes elongatus
C. heterurus
Oxylipurus melanotus
Marbled Wood-quail, *Odontophorus gujanensis*
Oxylipurus repandus
Spotted Wood-quail, *Odontophorus guttatus*
Oxylipurus guttatus
White-throated Wood-quail, *Odontophorus leucolaemus*
Menacanthus meridionalis
Long-tailed Partridge, *Dendrortyx macroura*
Chelopistes simillis
Highland Partridge, *Dendrortyx leucophrys*
Chelopistes dendrortyx
Peacock, *Pavo cristatus*
Amyrsidea phaeostoma
Goniocotes parviceps
G. rectangularis
Goniodes meinertzhageni
G. pavonis
Lipeurus pavo
Hen, *Gallus domesticus*
Cuculogaster heterogaphus
Goniocotes gallinae
Goniodes assimilis
G. gigas
Lipeurus caponis
Menacanthus stramineus
Menapon gallinae
M. pallens
Guinea Hen, *Numida meleagris*
Goniocotes gallinae
Goniodes gigas
G. numidae
Lipeurus numidae
Menacanthus numidae
Menapon gallinae
Turkey, *Meleagris gallopavo*
Chelopistes meleagridis
Menacanthus stramineus
Oxylipurus corpulentus
O. polytrapezius
Ocellated Turkey, *Agriocharis ocellata*
Oxylipurus agriocharis
Whooping Crane, *Grus americana*
Heleonomus assimilis
Sandhill Crane, *Grus canadensis*
Gruimenopom canadense
Esthiopterum brevicephalus
Limpkin, *Aramus guarauna*
Ibidocercus scolopaceus
Laemobothrion cubense
Clapper Rail, *Rallus longirostris*
Rallicola californicus
Virginia Rail, *Rallus limicola*
Fulicoffula cumstocki
Incidifrons monachus
Rallicola californicus
Water Rail, *Rallus aquaticus*
Fulicoffula rallina
Incidifrons ralli
Pseudomenopon scopulacorne
Rallicola cuspidatus
Spotted Crane, *Porzana porzana*
Rallicola mystax
Yellow Rail, *Coturnicops noveboracensis*
Rallicola porzanae
Wood Rail, *Aramides cajanea*
Fulicoffula volsella
Rallicola ewingi
Mexican Crane, *Laterallus albigularis*
Fulicoffula obstinata
Pseudomenopon costaricense
Corn Crane, *Crex crex*
Rallicola ortygometrae
Purple Gallinule, *Porphyryla martinica*
Rallicola elliotti
Common Gallinule, *Gallinula chloropus*
Fulicoffula gallinula
Incidifrons gallinula
Laemobothrion chloropodis
European Coot, *Fulica atra*
Fulicoffula lurida
Incidifrons fulicae
Laemobothrion atrum
Pseudomenopon pilosum
Rallicola fulicae
American Coot, *Fulica americana*
Fulicoffula longipila
Incidifrons transpositus
Pseudomenopon pacificum

- Rallicola fulicae*
 Sun Grebe, *Heliornis fulica*
Fulicoffula heliornis
 Jacana, *Jacana spinosa*
Rallicola exiguifrons
 European Oystercatcher, *Haematopus ostralegus*
Actornithophilus grandiceps
Austromenopon haemantopi
Saemundssonia haemantopi
 American Oystercatcher, *Haematopus palliatus*
Lunaceps haemantopi
Quadriceps auratus
 Lapwing, *Vanellus vanellus*
Actornithophilus svobodae
Lunaceps holophaeus
Saemundssonia temporalis
 Ringed Plover, *Charadrius hiaticula*
Quadriceps fissus
Quadriceps hiaticulae
Saemundssonia platygaster
 Semipalmated Plover, *Charadrius semipalmatus*
Quadriceps major
Q. opacus
Saemundssonia platygaster
 Killdeer, *Charadrius vociferus*
Austromenopon aegialitidis
Quadriceps boeophilus
 Dotterel, *Eudromias morinellus*
Saemundssonia semivittata
 American Golden Plover, *Pluvialis dominica*
Actornithophilus timidus
Quadriceps orarius
Saemundssonia hawaiiensis
 Black-bellied Plover, *Squatarola squatarola*
Actornithophilus flavipes
Austromenopon squatarolae
Lunaceps incoenis
Quadriceps hospes
Saemundssonia naumanni
 Ruddy Turnstone, *Arenaria interpres*
Rediellia pediculoides
Actornithophilus bicolor
Quadriceps strepsilaris
 Black Turnstone, *Arenaria melanocephala*
Actornithophilus tigrus
 American Woodcock, *Philohela minor*
Rhynonirmus infuscatus
 European Woodcock, *Scolopax rusticola*
Austromenopon icterum
Cummingsiella aurea
Rhynonirmus helvolus
 Common Snipe, *Capella gallinago*
Austromenopon durisetosum
Cummingsiella ambigua
Rhynonirmus scolopacis
Actornithophilus stictus
Rhynonirmus magnocephalus
 European Jacksnipe, *Lymnocyrtes minimus*
Actornithophilus multisetosus
 Long-billed Curlew, *Numenius americanus*
Cummingsiella longirostricola
C. ovalis
 Eurasian Curlew, *Numenius arquata*
Actornithophilus patellatus
Austromenopon crocatum
Cummingsiella ovalis
Lunaceps numenii
Saemundssonia humeralis
S. viridiscola
 Whimbrel, *Numenius phaeopus*
Actornithophilus ocellatus
Austromenopon phaeopodis
Lunaceps phaeopi
Saemundssonia scolopacisphaeopodis
S. viridicola
 Bristle-thighed Curlew, *Numenius tahitiensis*
Lunaceps hopkinsi
 Eskimo Curlew, *Numenius borealis*
Lunaceps rileyi
 Upland Plover, *Bartramia longicauda*
Rhynonirmus infuscatus
 Spotted Sandpiper, *Actitis macularia*
Quadriceps ravus
 Solitary Sandpiper, *Tringa solitaria*
Quadriceps waterstoni
 Wood Sandpiper, *Tringa glareola*
Quadriceps obscurus
 Wandering Tattler, *Heteroscelus incanum*
Actornithophilus kilauensis
Saemundssonia hawaiiensis
 Polynesian Tattler, *Heteroscelus brevipes*
Quadriceps impar
 Willet, *Catoptrophorus semipalmatus*

- Austromenopon sachtlebeni*
Quadraceps carrikeri
 Greater Yellowlegs, *Totanus melanoleucus*
Quadraceps austini
 Lesser Yellowlegs, *Totanus flavipes*
Quadraceps falcigerus
 Knot, *Calidris canutus*
Lunaceps drosti
Saemundssonina canuti
S. islandica
 Purple Sandpiper, *Erolia maritima*
Lunaceps nereis
 Pectoral Sandpiper, *Erolia melanotos*
Actornithophilus morsitans
 Least Sandpiper, *Erolia minutilla*
Actornithophilus morsitans
A. trilobatus
Carduiceps zonarius
Saemundssonina fusiformis
 Dunlin, *Erolia alpina*
Austromenopon alpinum
Carduiceps meinertzhageni
C. zonarius
 Short-billed Dowitcher, *Limnodromus*
griseus
Actornithophilus albus
 Long-billed Dowitcher, *Limnodromus scolopaceus*
Quadraceps klatti
 Semipalmated Sandpiper, *Ereunetes pusillus*
Actornithophilus hirsutus
 Western Sandpiper, *Ereunetes mauri*
Lunaceps cabanisi
 Marbled Godwit, *Limosa fedoa*
Carduiceps clayae
Lunaceps clayae
L. lucidus
Rotundiceps cordatus
 Bar-tailed Godwit, *Limosa lapponica*
Austromenopon meyeri
Carduiceps clayae
Saemundssonina limosae
 Hudsonian Godwit, *Limosa haemastica*
Lunaceps pascalis
Rotundiceps cordatus
 Black-tailed Godwit, *Limosa limosa*
Actornithophilus spimulosus
Austromenopon limosae
Carduiceps cingulatus
Saemundssonina tompsoni
 Ruff, *Philomachus pugnax*
Actornithophilus pustulosus
Austromenopon lutescens
Carduiceps fulvofasciatus
Lunaceps holophaeus
 Sanderling, *Crocethia alba*
Actornithophilus albus
Carduiceps complexivus
Lunaceps actophilus
 American Avocet, *Recurvirostra americana*
Actornithophilus uniformis
Austromenopon indistinctum
Cirrophthirius recurvirostrae
C. testudinarius
Cummingsiella inexpectata
Quadraceps zephyra
 Black-necked Stilt, *Himantopus mexicanus*
Actornithophilus mexicanus
Quadraceps mexicanus
 Red Phalarope, *Phalaropus fulicarius*
Austromenopon corporosum
Quadraceps phalaropi
 Wilson's Phalarope, *Steganopus tricolor*
Quadraceps fimbriatus
 Northern Phalarope, *Lobipes lobatus*
Carduiceps subscalaris
Quadraceps connexus
 Mexican Thick-knee, *Burhinus bistriatus*
Quadraceps acuticeps
 Pomarine Jaeger, *Stercorarius pomarinus*
Actornithophilus brachycephalus
Austromenopon circinatum
A. fuscofasciatum
Perineus grandis
Perineus laculatus
Quadraceps stellaepolaris
 Parasitic Jaeger, *Stercorarius parasiticus*
Quadraceps normifer
Saemundssonina cephalus
 Long-tailed Jaeger, *Stercorarius longicaudus*
Quadraceps parvopallidus
 Skua, *Catharacta skua*
Perineus piratae
Saemundssonina stresemanni
 Glaucous Gull, *Larus hyperboreus*
Quadraceps striolatus
Saemundssonina lari
 Glaucous-winged Gull, *Larus glaucescens*

- Actornithophilus junebri*
Austromenopon infrequens
 Great Black-backed Gull, *Larus marinus*
Saemundssonina gonothorax
Actornithophilus lari
 Herring Gull, *Larus argentatus*
Quadriceps ornatus
 Ring-billed Gull, *Larus delawarensis*
Quadriceps sublingulatus
 Mew Gull, *Larus canus*
Quadriceps ornatus
Saemundssonina congener
 Black-headed Gull, *Larus ridibundus*
Austromenopon ridibundus
Quadriceps punctatus
 Laughing Gull, *Larus atricilla*
Saemundssonina gonothorax
 Bonaparte's Gull, *Larus philadelphia*
Actornithophilus junebri
 Heermann's Gull, *Larus heermanni*
Quadriceps felix
Saemundssonina meinertzhageni
 Ivory Gull, *Pagophila eburnea*
Saemundssonina pagophilae
 Black-legged Kittiwake, *Rissa tridactyla*
Austromenopon transversum
Quadriceps lineolatus
Q. paulschulzei
Saemundssonina tridactylae
 Ross' Gull, *Rhodostethia rosea*
Quadriceps bryki
 Sabine's Gull, *Xema sabini*
Quadriceps lineatus
 Forster's Tern, *Sterna forsteri*
Saemundssonina parvigenetalis
 Common Tern, *Sterna hirundo*
Austromenopon pachypus
Quadriceps sellatus
Saemundssonina sterna
 Arctic Tern, *Sterna paradisaea*
Quadriceps houri
 Roseate Tern, *Sterna dougallii*
Quadriceps giebeli
 Sooty Tern, *Sterna fuscata*
Quadriceps birostris
Q. lepidus
Q. obtusus
Saemundssonina peristicta
S. petersi
 Bridled Tern, *Sterna anaethetus*
Saemundssonina meridiana
 Royal Tern, *Thalasseus maximus*
Quadriceps praestans
 Sandwich Tern, *Thalasseus sandvicensis*
Actornithophilus piceus
Saemundssonina laticaudata
 Caspian Tern, *Hydroprogne caspia*
Quadriceps caspius
Q. griseus
 Black Tern, *Chlidonias niger*
Actornithophilus maurus
 Noddy Tern, *Anous stolidus*
Actornithophilus epiphanes
A. milleri
Clypedon incisus
Saemundssonina remota
 Razorbill, *Alca torda*
Austromenopon nigropleurum
Quadriceps alcae
Saemundssonina celidoxa
 Common Murre, *Uria aalge*
Austromenopon uriae
Quadriceps obliquus
Saemundssonina calva
 Dovekie, *Plautus alle*
Austromenopon merguli
Quadriceps klatti
Saemundssonina merguli
 Black Guillemot, *Cephus grylle*
Saemundssonina grylle
 Pigeon Guillemot, *Cephus columba*
Quadriceps pacificus
Saemundssonina procax
 Marbled Murrelet, *Brachyramphus marmoratum*
Saemundssonina montereyi
 Ancient Murrelet, *Synthliboramphus antiquum*
Quadriceps maritimus
Saemundssonina montereyi
 Cassin's Auklet, *Ptychoramphus aleutica*
Quadriceps maritimus
Saemundssonina isolita
S. montereyi
 Crested Auklet, *Aethia cristatella*
Saemundssonina wumisuzume
 Least Auklet, *Aethia pusilla*
Quadriceps aethereus

- Rhinoceros Auklet, *Cerorhinca monocerata*
Quadriceps maritimus
Saemundssonina acutipecta
- Common Puffin, *Fratercula arctica*
Auromenopon fraterculae
Saemundssonina fraterculae
- Tufted Puffin, *Lunda cirrhata*
Actornithophilus perplanus
Quadriceps pacificus
- Rock Dove, *Columba livia*
Campanulotes compar
Coloceras fahrenheitzi
C. piageti
Colpocephalum turbinatum
Columbicola columbae
Horostiella lata
- Mourning Dove, *Zenaidura macroura*
Columbicola baculoides
C. macrourae
Physconelloides zenaidurae
- Passenger Pigeon, *Ectopistes migratorius*
Columbicola extinctus
- Ground Dove, *Columbigallina passerina*
Columbicola passerinae
- Mexican Parrotlet, *Forpus cyanopygius*
Paragoniocotes illustris
Psittacobrosus forpi
- Red-and-Green Macaw, *Ara chloroptera*
Heteromenopon sincipitalis
Paragoniocotes mirabilis
Psittacomenopon acuticeps
- Scarlet Macaw, *Ara macao*
Neopsittaconirmus trinoton
Paragoniocotes nanus
- Green Macaw, *Ara militaris*
Epiara dimorpha
- Yellow-billed Cuckoo, *Coccyzus americanus*
Cuculoecus coccygii
C. latifrons
Cuculiphilus decoratus
- Black-billed Cuckoo, *Coccyzus erythrophthalmus*
Cuculiphilus fasciatus
- Squirrel Cuckoo, *Piaya cayana*
Cuculicola atopus
- Smooth-billed Ani, *Crotophaga ani*
Osborniella crotophagae
Vernoniella guimaraesi
- Groove-billed Ani, *Crotophaga sulcirostris*
Vernoniella macgregori
- Barn Owl, *Tyto alba*
Kurodaia subpachygaster
- Screech Owl, *Otus asio*
Kurodaia painei
Strigiphilus ceblebrachys
- Great Horned Owl, *Bubo virginianus*
Strigiphilus ocellatus
- Snowy Owl, *Nyctea scandiaca*
Kurodaia menoponoides
Strigiphilus ceblebrachys
S. barbatus
- Burrowing Owl, *Speotyto cunicularia*
Kurodaia pectinata
Strigiphilus speotyti
- Great Gray Owl, *Strix nebulosa*
Strigiphilus remotus
S. syrnii
- Long-eared Owl, *Asio otus*
Strigiphilus cursor
S. barbatus
- Short-eared Owl, *Asio flammeus*
Strigiphilus cursor
S. nudipes
- Squamulated Owl, *Ciccaba virgata*
Strigiphilus viridicus
- Common Nighthawk, *Chordeiles minor*
Multicola macrocephalus
- Chimney Swift, *Chaetura pelagica*
Dennys dubius
Eureum ewingi
- Vaux's Swift, *Chaetura vauxi*
Dennys richmondi
- Chestnut-collared Swift, *Chaetura rutila*
Dennys brunneitorques
- Spiny-tailed Swift, *Chaetura spinicauda*
Dennys limbus
- White-throated Swift, *Aëronautas saxatilis*
Dennys bruneri
- Smoky Swift, *Cypseloides fumigatus*
Dennys spininotus
- Black Swift, *Cypseloides niger*
Dennys spiniger
- Ruby-throated Hummingbird, *Archilochus colubris*
Ricinus lineatus
- Costa's Hummingbird, *Calypste costae*
Trochiloecetes prominens
- Anna's Hummingbird, *Calypste anna*

- Bruelia eustigma*
 Rufous Hummingbird, *Selasphorus rufus*
Picicola snodgrassi
Trochiloecetes ochoterenal
 Lesser Broad-tailed Hummingbird, *Selasphorus flammula*
Ricinus doratophorum
 Rieffer's Hummingbird, *Amazilia tzacatl*
Ricinus jiminezi
 Coppery-tailed Trogon, *Trogon elegans*
Trogonirmus elegans
 Large-tailed Trogon, *Trogon melanurus*
Trogonirmus melanurus
 Violaceous Trogon, *Trogon violaceus*
Trogonirmus hastiformis
T. laticephalis
 Belted Kingfisher, *Megaceryle alcyon*
Actornithophilus subpustulatus
 Rufous-crowned Motmot, *Momotus mexicanus*
Philopterus dennyi
 Blue-crowned Motmot, *Momotus momota*
Bruelia marginella
 Emerald Toucanet, *Aulacorhynchus prasinus*
Austrophilopterus minutus
 Collared Aracari, *Pteroglossus torquatus*
Austrophilopterus torquatus
 Keel-billed Toucan, *Ramphastos sulfuratus*
Austrophilopterus subsimilis
 Yellow-shafted Flicker, *Colaptes auratus*
Philopterus alienus
Picicola mississippiensis
Menacanthus colaptis
Penenirmus jugens
 Pileated Woodpecker, *Dryocopus pileatus*
Picicola marginatulus
 Gray-breasted Woodpecker, *Centurus hypopolius*
Menacanthus praecursor
 Acorn Woodpecker, *Melanerpes formicivorus*
Penenirmus californiensis
 Yellow-bellied Sapsucker, *Sphyrapicus varius*
Penenirmus californicus
P. varius
 Hairy Woodpecker, *Dendrocopos villosus*
Penenirmus californiensis
- Downy Woodpecker, *Dendrocopos pubescens*
Menopon hirsutum
Myrsidea junerea
Penenirmus evagens
 Nuttall's Woodpecker, *Dendrocopos nuttallii*
Philopterus singularis
 Black-backed Three-toed Woodpecker, *Picoïdes arcticus*
Menacanthus picicola
 Northern Three-toed Woodpecker, *Picoïdes tridactylus*
Menacanthus picicola
 Barred Antshrike, *Thamnophilus doliatus*
Machaerilaemus laticorpus
 Masked Tityra, *Tityra semifasciata*
Machaerilaemus tityrus
 White-collared Manakin, *Manacus candei*
Philopterus bruneri
 Eastern Kingbird, *Tyrannus tyrannus*
Penenirmus tyrannus
Ricinus angulatus
 Western Kingbird, *Tyrannus verticalis*
Picicola foedus
 Cassin's Kingbird, *Tyrannus vociferans*
Ricinus arcuatus
 Ash-throated Flycatcher, *Myiarchus cinerascens*
Menacanthus distinctus
Philopterus rufus
Picicola foedus
 Say's Phoebe, *Sayornis saya*
Picicola foedus
 Costa Rican Flycatcher, *Empidonax atriceps*
Myrsidea stenodesma
 Western Flycatcher, *Empidonax difficilis*
Ricinus sucinaceus
Bruelia ductilis
 Eastern Wood Pewee, *Contopus virens*
Philopterus fuscoventralis
 Vermilion Flycatcher, *Pyrocephalus rubinus*
Philopterus insulicola
 Skylark, *Alda arvensis*
Menacanthus alaudae
 Horned Lark, *Eremophila alpestris*
Ricinus serratus
 Tree Swallow, *Iridoprocne bicolor*
Bruelia longa
Philopterus major

- Bank Swallow, *Riparia riparia*
Bruelia tenuis
Myrsidea latijrons
- Rough-winged Swallow, *Stelgidopteryx ruficollis*
Myrsidea pallorus
- Barn Swallow, *Hirundo rustica*
Bruelia domestica
Machaerilaemus malleus
Myrsidea rustica
M. straminea
- Purple Martin, *Progne subis*
Bruelia brevipes
Machaerilaemus americanus
Myrsidea dissimilis
Philopterus domesticus
- Gray-breasted Martin, *Progne chalybea*
Dennys similis
- Blue Jay, *Cyanocitta cristata*
Philopterus cristata
- White-tipped Brown Jay, *Psilorhinus mexicanus*
Philopterus underwoodi
- Scrub Jay, *Aphelocoma coerulescens*
Menacanthus persignatus
- Black-billed Magpie, *Pica pica*
Bruelia biocellata
Philopterus picae
- Common Raven, *Corvus corax*
Bruelia argula
Menacanthus gonophaeus
Philopterus corvi
- Common Crow, *Corvus brachyrhynchos*
Bruelia rotundata
Myrsidea interrupta
Philopterus corvi
- Rook, *Corvus frugilegus*
Menacanthus laticeps
Philopterus atratus
- Hooded Crow, *Corvus cornix*
Bruelia uncinosa
- Piñon Jay, *Gymnorhinus cyanocephala*
Philopterus phillipi
- Clark's Nutcracker, *Nucifraga columbiana*
Myrsidea brunea
- Black-capped Chickadee, *Parus atricapillus*
Philopterus rutteri
- Carolina Chickadee, *Parus carolinensis*
Bruelia vulgata
- Verdin, *Auriparus flaviceps*
Bruelia audax
- Common Bushtit, *Psaltriparus minimus*
Menacanthus robustus
- Brown Creeper, *Certhia familiaris*
Penenirmus trimarginis
- Dipper, *Cinclus mexicanus*
Menacanthus aleskensis
Philopterus americanus
- Winter Wren, *Troglodytes troglodytes*
Penenirmus albiventris
- Bewick's Wren, *Thryomanes bewickii*
Philopterus mirus
- Cactus Wren, *Campylorhynchus brunnei-capillum*
Menacanthus distinctus
- Catbird, *Dumetella carolinensis*
Picicola orpheus
- Red-wing, *Turdus musicus*
Bruelia iliaci
B. inornata
Myrsidea iliaci
- Blackbird, *Turdus merula*
Bruelia ansel
B. jacobii
B. merulensis
Philopterus merulae
Ricinus ernstlangi
- Clay-colored Robin, *Turdus grayi*
Penenirmus caliginous
- Robin, *Turdus migratorius*
Bruelia vulgata
Ricinus merulae
Sturnidoecus simplex
- Fieldfare, *Turdus pilaris*
Bruelia antimarginalis
Philopterus bischoffi
- Wood Thrush, *Hylocichla mustelina*
Myrsidea incerta
- Hermit Thrush, *Hylocichla guttata*
Myrsidea incerta
- Swainson's Thrush, *Hylocichla ustulata*
Myrsidea incerta
- Gray-cheeked Thrush, *Hylocichla minima*
Myrsidea incerta
- Veery, *Hylocichla juscenscens*
Myrsidea juscomarginata
- Eastern Bluebird, *Sialia sialis*
Philopterus sialii

- Golden-crowned Kinglet, *Regulus satrapa*
Ricinus frenatus
- White Wagtail, *Motacilla alba*
Menacanthus pusillus
Philopterus passerinus
Sturnidoecus aeneas
- Yellow Wagtail, *Motacilla flava*
Philopterus passerinus
- Water Pipit, *Anthus spinoletta*
Ricinus japonicus
- Meadow Pipit, *Anthus pratensis*
Bruelia cordyalla
- Bohemian Waxwing, *Bombycilla garrula*
Bruelia brachythorax
Philopterus garrulae
Ricinus bombycillae
- Cedar Waxwing, *Bombycilla cedrorum*
Bruelia cedrorum
- Phainopepla, *Phainopepla nitens*
Bruelia peninsularis
Picicola foedus
- Northern Shrike, *Lanius excubitor*
Bruelia imponderabilica
Menacanthus camelinus
- Starling, *Sturnus vulgaris*
Bruelia nebulosa
Menacanthus mutabilis
Myrsidea cucularis
Sturnidoecus sturni
- Crested Myna, *Acridotheres cristatellus*
Myrsidea invadens
- Prothonotary Warbler, *Protonotaria citreata*
Ricinus pallens
- Blue-winged Warbler, *Vermivora pinus*
Ricinus picturatus
- Orange-crowned Warbler, *Vermivora celata*
Ricinus picturatus
- Yellow Warbler, *Dendroica petechia*
Myrsidea ridulosa
- Yellow-breasted Chat, *Icteria virens*
Picicola foedus
- House Sparrow, *Passer domesticus*
Bruelia obligata
B. subtilis
B. vulgata
Menacanthus annulatus
Philopterus fringillae
- European Tree Sparrow, *Passer montanus*
Bruelia cyclothorax
- B. subtilis*
- Wagler Oropendola, *Zarhynchus wagleri*
Bizarriifrons francisi
Myrsidea luoris
M. mirabilis
- Bobolink, *Dolichonyx oryzivorus*
Menacanthus expansus
- Eastern Meadowlark, *Sturnella magna*
Bruelia abrupta
B. picturata
- Yellow-headed Blackbird, *Xanthocephalus xanthocephalus*
Bruelia xanthocephali
- Redwinged Blackbird, *Agelaius phoeniceus*
Bruelia ornatissima
Philopterus agelaii
- Scarlet-headed Oriole, *Icterus pustulatus*
Machaerilaemus icterus
- Boat-tailed Grackle, *Cassidix mexicanus*
Bizarriifrons meinertzhageni
- Common Grackle, *Quiscalus quiscula*
Philopterus quiscali
- Brown-headed Cowbird, *Molothrus ater*
Bruelia ornatissima
- Swainson Tanager, *Piranga bidentata*
Bruelia melanococa
- Cardinal, *Richmondia cardinalis*
Menacanthus spinosus
- Rose-breasted Grosbeak, *Pheucticus ludovicianus*
Bruelia pallidula
- Varied Bunting, *Passerina versicolor*
Ricinus australis
- Dickcissel, *Spiza americana*
Myrsidea incerta
- Brambling, *Fringilla montifringilla*
Bruelia cyclothorax
- Evening Grosbeak, *Hesperiphona vespertina*
Bruelia pallidula
- Purple Finch, *Carpodacus purpureus*
Bruelia vulgata
- House Finch, *Carpodacus mexicanus*
Bruelia vulgata
Myrsidea conspicua
- Pine Grosbeak, *Pinicola enucleator*
Menacanthus alaskensis
- Chestnut-capped Atlapetes, *Atlapetes brunnei-nucha*
Menacanthus difficilis

- European Goldfinch, *Carduelis carduelis*
 Bruelia densilimba
 Menacanthus carduelis
American Goldfinch, *Spinus tristis*
 Myrsidea incerta
Red Crossbill, *Loxia curvirostra*
 Bruelia limbata
 Myrsidea quadrimaculata
 Philopterus curvirostrae
Rufous-sided Towhee, *Pipilo erythrophthalmus*
 Bruelia vulgata
 Myrsidea melanorum
 Ricinus subhastatus
Brown Towhee, *Pipilo fuscus*
 Bruelia vulgata
Savannah Sparrow, *Passerculus sandwichensis*
 Ricinus diffusus
Lark Sparrow, *Chondestes grammacus*
 Bruelia augustifrons
Sage Sparrow, *Amphispiza belli*
 Bruelia lautiuscula
White-winged Junco, *Junco aikenii*
 Ricinus hastatus
 R. pallidus
Slate-colored Junco, *Junco hyemalis*
 Bruelia vulgata
 Ricinus pallidus
Oregon Junco, *Junco oreganus*
 Penenirmus mirinotatus
 Ricinus hastatus
 R. pallidus
Tree Sparrow, *Spizella arborea*
 Bruelia vulgata
Field Sparrow, *Spizella pusilla*
 Machaerilaemus complexus
White-crowned Sparrow, *Zonotrichia leucophrys*
 Bruelia vulgata
Golden-crowned Sparrow, *Zonotrichia atricapilla*
 Bruelia vulgata
Fox Sparrow, *Passerella iliaca*
 Ricinus angulatus
Song Sparrow, *Melospiza melodia*
 Ricinus melospizae
 Machaerilaemus maestus
 M. melospizae
 Menacanthus chrysophaeus
Lapland Longspur, *Calcarius lapponicus*
 Bruelia infrequens
 Menacanthus meniscus
Snow Bunting, *Plectrophenax nivalis*
 Bruelia nivalis
 Myrsidea major
 Philopterus hamatus
 Ricinus angulatus

DEPARTMENT OF BIOLOGY, CENTRAL MICHIGAN UNIVERSITY, MT. PLEASANT,
MICHIGAN, OCTOBER 3, 1959